

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

ORIGINAL

FIELD NOTES

OF

THE DEPENDENT RESURVEY OF  
A PORTION OF THE NORTH BOUNDARY,  
A PORTION OF THE SUBDIVISIONAL LINES,  
AND

THE DEPENDENT RESURVEY OF  
A PORTION OF MINERAL SURVEY NOS. 6655 AND 6661,  
AND

A CORRECTIVE RESURVEY OF  
A PORTION OF THE SUBDIVISIONAL LINES,  
IN

**TOWNSHIP 42 SOUTH, RANGE 19 EAST,**

OF THE SALT LAKE MERIDIAN  
IN THE STATE OF UTAH

EXECUTED BY

***Scott A. Burkhardt***  
***Cadastral Surveyor***

Under Special Instructions dated **April 27, 2015**, approved **April 27, 2015**,  
which provided for the surveys included under Group Number **1305, Utah**, and  
Assignment Instructions dated **April 27, 2015**.

Survey Commenced, **May 5, 2015**  
Survey Completed, **May 14, 2015**

# INDEX DIAGRAM

TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

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## TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

The following field notes are those of the dependent resurvey of a portion of the north boundary and a portion of the subdivisional lines, the dependent resurvey of a portion of Mineral Survey Nos. 6655 and 6661, and a corrective resurvey of a portion of the subdivisional lines, in T.42S., R. 19 E., Salt Lake Meridian, Utah.

## HISTORY OF SURVEYS

Surveyed by		Retr. or Resurveyed by	
<b>SOUTH BOUNDARY</b>			
All	J.D. Davis	2009	
<b>EAST BOUNDARY</b>			
All	J.D. Davis	2009	
<b>WEST BOUNDARY</b>			
Portion	E.E. Miller	1909	
Portion			J.L. Thomas 2000
Portion	S.A. Burkhardt	2008	
Portion			J.D. Davis 2009
<b>NORTH BOUNDARY</b>			
Portion	E.E. Miller	1909	
Portion	J.D. Davis	2009	J.D. Davis 2009
<b>SUBDIVISION</b>			
Portion	E.E. Miller	1909	
Portion			J.L. Thomas 2000
Portion	J.D. Davis	2009	

Meanders of the right bank of the San Juan River were surveyed by E.E. Miller in 1909. A portion of the meanders of the right bank of the San Juan River was dependently resurveyed by J.L. Thomas in 2000. A survey of the meanders of the left bank and an informative traverse of the meanders of the right bank of the San Juan River, were performed by J.D. Davis in 2009.

Mineral Survey Nos. 6651, 6653, 6655, and 6661 were surveyed by J.H. Winwood in 1920. A portion of Mineral Survey No. 6651 was dependently resurveyed by J.L. Thomas in 2000.

## TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

The survey was executed in accordance with the specifications set forth in the Manual of Surveying Instructions, 2009, and the Special Instructions for Group No. 1305, dated April 27, 2015.

The direction of each line is with reference to the true meridian, established by Global Positioning System (GPS) utilizing Real-Time Kinematic (RTK) techniques throughout the survey. The positional accuracy of this survey complies with the *Standards for the Positional Accuracy of Cadastral Surveys When Using Global Navigation Satellite Systems (GNSS)*, dated February 23, 2009. Trimble model R8 GPS receivers were used for field collection. Cadastral Automated Plat Drafting (CAPD) software was the primary software utilized for project calculations.

Preliminary to the resurvey, the lines of the prior surveys were retraced and a search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

Geodetic control was derived from GPS static observations, post processed by the National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS): DL3642 MC09 NUCLA CORS ARP, DI3419 P012 MONTICELLOUT2006 CORS ARP, and DH6916 MC04 MESA CNTY 04 COOP CORS ARP.

The geographic position of the corner of sections 5, 6, 31, and 32, Tps. 41 and 42 S., R. 19 E., as determined by direct RTK methods from the National Geodetic Survey OPUS solution, is as follows:

Latitude: **37°10'18.746" N.**,  
Longitude: **109°51'17.489" W.**, N.A.D. 83 (2011), EPOCH: 2010.00,  
Network Accuracy = 0.200 meter at 95% confidence.

The geographic position of the corner of sections 5, 6, 7, and 8, T. 42 S., R. 19 E., as determined by direct RTK methods from the National Geodetic Survey OPUS solution, is as follows:

Latitude: **37°09'26.363" N.**,  
Longitude: **109°51'17.462" W.**, N.A.D. 83 (2011), EPOCH: 2010.00,  
Network Accuracy = 0.200 meter at 95% confidence.

DEPENDENT RESURVEY OF A PORTION OF THE NORTH BOUNDARY,  
TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

CHAINS

Dependent Resurvey of a Portion of the North Boundary,  
T. 42 S., R. 19 E., Salt Lake Meridian, Utah

The Reestablishment of the Survey Executed E.E. Miller in 1909,  
and the Resurvey Executed by J.D. Davis in 2009

Beginning at the 1/4 section corner of sections 5 and 32, monumented with a stainless steel post, 2 1/2 inches diameter, firmly set, projecting 1 inch above the ground, with brass cap marked as described in the official record of the 2009 resurvey, with a steel fence post north of the corner.

**N. 89°59.9'W.**, between sections 5 and 32.

- 20.210** Point for the intersection with line 2-3 of the Red Bed Oil Claim No. 2 Placer, Mineral Survey No. 6661, hereinafter described.
- 39.999** The corner of sections 5, 6, 31, and 32, monumented with an iron post, 3 inches diameter, firmly set, projecting 14 inches above the ground, with brass cap, oriented to the south, marked as described in the official record of the 1909 survey.

Dependent Resurvey of a Portion of the Subdivisional Lines,  
T. 42 S., R. 19 E., Salt Lake Meridian, Utah

The Reestablishment of the Survey Executed by E.E. Miller in 1909

From the corner of sections 5, 6, 7, and 8, monumented with an iron post, 2 inches diameter, firmly set, projecting 13 inches above an embedded mound of stone, 3 feet base, 1/2 foot high, with brass cap marked as described in the official record of the 1909 survey.

**N. 0°01.4'W.**, between sections 5 and 6.

- 40.145** Point for the 1/4 section corner of sections 5 and 6, at proportionate distance. There is no remaining original evidence of the iron post.

Set an aluminum post, 30 inches long, 2 1/2 inches diameter, 16 inches in the ground, to bedrock, magnet at base, in a mound of stone, 2 1/2 feet base, to aluminum cap marked

DEPENDENT RESURVEY OF A PORTION OF THE SUBDIVISIONAL LINES,  
TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

CHAINS

T42S R19E

1/4

S6 | S5

2015

Corner is located in gently-rolling, red shale hills.

- 80.290** The corner of sections 5, 6, 31, and 32, on the north boundary of the township, hereinbefore described.

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Dependent Resurvey of a Portion of Mineral Survey No. 6655, 1907 Placer,  
T. 42 S., R. 19 E., Salt Lake Meridian, Utah

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The Reestablishment of the Survey Executed by  
J.H. Winwood in 1920

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From the 1909 meander corner of sections 5 and 8, on the right bank of the San Juan River, which also functions as Corner Number 3 of the 1907 Placer, Mineral Survey No. 6655, hereinafter described in the corrective resurvey.

**N. 50°10.4'E.**, on line 3-4 of the 1907 Placer, Mineral Survey No. 6655.

- 6.241** Point for Corner Number 4 of the 1907 Placer, Mineral Survey No. 6655, at proportionate distance determined by grant boundary adjustment. There is no remaining original evidence of the iron post.

Set an aluminum post, 30 inches long, 2 1/2 inches diameter, 17 inches in the ground, to bedrock, magnet at base, in a mound of stone, 3 feet base, to aluminum cap marked

T42S R19E

1907 P  
MS6655  
COR. NO. 4

2015

Corner is located in an area formerly used as a corral with considerable animal waste remaining, on a bedrock bench approximately 10 feet elevation above the river floodplain.

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**N. 0°02.6'W.**, on line 4-5 of the 1907 Placer, Mineral Survey No. 6655.

DEPENDENT RESURVEY OF A PORTION OF MINERAL SURVEY NO. 6655, 1907 PLACER,  
TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

CHAINS

- 28.376** Point for a witness point on line 4-5 of the 1907 Placer, Mineral Survey No. 6655.

Set an aluminum post, 30 inches long, 2 1/2 inches diameter, on bedrock, magnet at base, in a mound of stone, 3 feet base, to aluminum cap marked

WP  
T42S R19E

MS6655 | S5  
1907 P |  
2015

Set a steel fence post north of the corner.

Corner is located on a narrow bedrock ridge with thin soil cover, extending east and west, south of a gravel quarry.

- 33.342** Point for Corner Number 5 of the 1907 Placer, Mineral Survey No. 6655, on line 2-3 of the Red Bed Oil Claim Number 3 Placer, Mineral Survey No. 6661, at single proportionate distance. There is no remaining original evidence of the iron post. Point falls in an active quarry where it is impracticable to establish a permanent monument at this time due to quarry activity.

Set a steel fence post at the true point.

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Dependent Resurvey of a Portion of Mineral Survey No. 6661,  
Red Bed Oil Claim Number 3 Placer and Red Bed Oil Claim Number 2 Placer,  
T. 42 S., R. 19 E., Salt Lake Meridian, Utah

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The Reestablishment of the Survey Executed by J.H. Winwood in 1920

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From Corner Number 2 of the Red Bed Oil Claim Number 3 Placer, Mineral Survey No. 6661, identical with Corner Number 3 of the Red Bed Oil Claim Number 4 Placer, Mineral Survey No. 6653, monumented with an iron post, 2 inches diameter, firmly set, projecting 12 inches above a mound of stone, 3 feet base, 2 feet high, with side of post marked as described in the official record of the 1920 survey. There is no remaining evidence of the accessory "X" and "BO" chiseled into bedrock.

From the corner, the 1/4 section corner of sections 5 and 6 bears N.81°54.5'W., 19.933 chains distance.

**S. 89°52.6'E.**, on line 2-3 of the Red Bed Oil Claim Number 3 Placer, Mineral Survey No. 6661.

- 14.293** Corner Number 5 of the 1907 Placer, Mineral Survey No. 6655 hereinbefore described.

- 23.775** Point for a witness point on line 2-3 of the Red Bed Oil Claim

DEPENDENT RESURVEY OF A PORTION OF MINERAL SURVEY NO. 6661,  
 CHAINS RED BED OIL CLAIM NUMBER 3 PLACER AND RED BED OIL CLAIM NUMBER 2 PLACER,  
 TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH  
 Number 3 Placer, Mineral Survey No. 6661.

Set an aluminum post, 30 inches long, 2 1/2 inches diameter, 20 inches in the ground, magnet at base, in a mound of stone, 3 feet base, to aluminum cap marked

WP  
 T42S R19E

MS6661  
RED BED NO. 3  
 S5  
 2015

Set a steel fence post west of the corner.

Corner is located on a bedrock ledge with thin soil cover, approximately 50 feet above the base of a west-facing slope of bedrock ledges, east of a gravel quarry.

- 39.951** Corner Number 3 of the Red Bed Oil Claim Number 3 Placer, Mineral Survey No. 6661, monumented with a "+ 3 6661" chiseled into sandstone bedrock.

At the corner ("+" chiseled into bedrock)

Set a brass tablet, 3 1/4 inches diameter, with 3 1/2 inches stem, flush with sandstone, in epoxy bond, into a drill hole on solid rock marked

T42S R19E

RB3  
 MS6661  
COR. NO. 3

2015

Corner is located in an area of exposed sandstone bedrock, on the top of a small mesa.

From the corner, a rusty iron post, 2 inches diameter, firmly set, projecting 12 inches above a mound of stone, 4 feet base, 2 1/2 feet high, with side of post punch marked 3-66, bears S.5°07'E., 4.7 links distance. The mound of stone is record, but the post is not of record and functions as an accessory only (1920 record: mound of rock alongside chisel marks).

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**N. 0°06.8'E.**, on line 3-4 of the Red Bed Oil Claim Number 3 Placer.

- 40.095** Corner Number 4 of the Red Bed Oil Claim Number 3 Placer, Mineral Survey No. 6661, monumented with an iron post, 2 inches diameter, firmly set, projecting 20 inches above an embedded mound of



DEPENDENT RESURVEY OF A PORTION OF MINERAL SURVEY No. 6661,  
 CHAINS RED BED OIL CLAIM NUMBER 3 PLACER AND RED BED OIL CLAIM NUMBER 2 PLACER,  
 TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

stone, 4 feet base, 1 foot high, with side of post marked as  
 described in the official record of the 1920 survey.

From which

An "+BO", with the marks 4 6661, chiseled into the sloping  
 surface of a red sandstone boulder, 4x7x18 feet, bears N.  
 60°2.2' E., 39.7 links distance.

Rehabilitate mound of stone to 3 feet base, 2 feet high.

**N. 89°59.9'W.**, on line 1-4 of the Red Bed Oil Claim Number 3  
 Placer.

- 39.989** Corner Number 1 of the Red Bed Oil Claim Number 3 Placer, Mineral  
 Survey No. 6661, on line 2-3 of the Red Bed Oil Claim Number 2  
 Placer, Mineral Survey No. 6661, monumented with an iron post, 2  
 inches diameter, firmly set, projecting 16 inches above an  
 embedded mound of stone, 4 feet base, with side of post marked as  
 described in the official record of the 1920 survey.

Rehabilitate mound of stone to 3 feet base, 1 foot high.

**N. 0°02.6'E.**, on line 2-3 of the Red Bed Oil Claim Number 2  
 Placer.

- 2.941** Point at intersection with the township line between sections 5  
 and 32, Ts. 41 and 42 S., R. 19 E.

Set an aluminum post, 30 inches long, 2 1/2 inches diameter, 29  
 inches in the ground, magnet at base, with aluminum cap marked

		T41S	R19E
		S 32	
MS6661	RB2	—+—	
		S 5	
		T42S	R19E
		2013	

Corner is located southwest of Mexican Hat Rock, with Mormon Tea  
 and grass.

- 26.206** Corner Number 3 of the Red Bed Oil Claim Number 2 Placer, Mineral  
 Survey No. 6661, monumented with an iron post, 2 inches diameter,  
 firmly set, projecting 8 inches above a mound of stone, 4 feet  
 base, with side of post marked as described in the official  
 record of the 1920 survey.

CORRECTIVE RESURVEY OF A PORTION OF THE SUBDIVISIONAL LINES,  
 RED BED OIL CLAIM NUMBER 3 PLACER,  
 CHAINS TOWNSHIP 42 SOUTH, RANGE 19 EAST, SALT LAKE MERIDIAN, UTAH

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Corrective Resurvey of a Portion of the Subdivisional Lines,  
 T. 42 S., R. 19 E., Salt Lake Meridian, Utah

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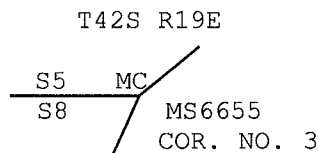
The Reestablishment of the Survey Executed E.E. Miller in 1909,  
 and the Resurvey Executed by J.D. Davis in 2009

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From the 1909 meander corner of sections 5 and 8 on the right bank of the San Juan River, determined at the center of an embedded mound of stone, 2 feet base. There is no remaining evidence of the 1909 iron post.

At the corner (center of mound of stone)

Set an aluminum post, 30 inches long, 2 1/2 inches diameter, 15 inches in the ground, to bedrock, with a magnet at base, in a mound of stone, 3 feet base, to aluminum cap marked



2015

From the corner, an unrecorded rebar, 1/2 inch diameter, firmly set, projecting 13 inches above the ground, bears S. 70°36.0' W., 5.9 links distance. This rebar is not utilized in the course of this corrective resurvey.

This corner also functions as Corner Number 3 of the 1907 Placer, Mineral Survey No. 6655.

The 2009 resurvey of T. 42 S., R. 19 E. overlooked this original evidence from the 1909 survey. The new meander corner of sections 5 and 8 on the right bank of the San Juan River set erroneously during the 2009 resurvey, bears N. 89°10.9' E., 221.3 links distance. The aluminum post, magnet, and t-post were removed.

**N. 89°56.4' W.**, between sections 5 and 8.

**29.246** The corner of sections 5, 6, 7, and 8, hereinbefore described.

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**FIELD ASSISTANTS**

Name	Capacity
Phil Freiberg	Survey Technician

## CERTIFICATE OF SURVEY

I, *Scott A. Burkhardt, Cadastral Surveyor*, HEREBY CERTIFY upon honor, that in pursuance of Special Instructions bearing the date of *April 27, 2015*, I have *dependently resurveyed a portion of the north boundary and a portion of the subdivisional lines, dependently resurveyed a portion of Mineral Survey Nos. 6655 and 6661, and have executed a corrective resurvey of a portion of the subdivisional lines, in Township 42 South, Range 19 East, of the Salt Lake Meridian, in the State of Utah*, which are represented in the foregoing field notes as having been executed by me and under my direction; and that said survey has been made in strict conformity with said Special Instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

June 10, 2015

Date

Scott A. Burkhardt

Cadastral Surveyor

## CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT  
Salt Lake City, Utah

The foregoing field notes of the *dependent resurvey of a portion of the north boundary and a portion of the subdivisional lines, the dependent resurvey of a portion of Mineral Survey Nos. 6655 and 6661, and the corrective resurvey of a portion of the subdivisional lines in Township 42 South, Range 19 East, Salt Lake Meridian; Utah*, executed by *Scott A. Burkhardt, Cadastral Surveyor*, having been critically examined and found correct, are hereby approved.

June 10, 2015

Date

Daniel W. Webb

Chief Cadastral Surveyor for Utah